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NOTICE OF ALLOWANCE AND FEE(S) DUE

46369

7590

09/08/2008

HESLIN ROTHENBERG FARLEY & MESITI P.C. 5 COLUMBIA CIRCLE ALBANY, NY 12203

EXAMINER

CHEN, QING

ART UNIT PAPER NUMBER

2191

DATE MAILED: 09/08/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,088	04/24/2001	Theodore G. Hoover JR.	POU920010016US1	4957

TITLE OF INVENTION: ORGANIZATION AND VISUALIZATION OF PERFORMANCE DATA IN SELECTED DISPLAY MODES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	12/08/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

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appropriate. All further indicated unless corrected international maintenance fee notifications.	correspondence including an including below or directed oth	g the Patent, advance of the lerwise in Block 1, by (a	rders and notification of a) specifying a new corre	maintenance fees wespondence address;	ill be and/or	mailed to the current (b) indicating a separ	correspondence address as rate "FEE ADDRESS" for
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PLEASE NOTE: Unl recordation as set fort (A) NAME OF ASSIG	less an assignee is identi h in 37 CFR 3.11. Comp GNEE		(B) RESIDENCE: (CIT	patent. If an assign assignment. Y and STATE OR C	OUNT	TRY)	ocument has been filed for up entity Government
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46369 7:	590 09/08/2008		EXAMINER		
HESLIN ROTHI	ENBERG FARLEY	CHEN, QING			
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ALBANY, NY 12	203		2191		
			DATE MAIL ED: 00/08/2008		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 2107 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 2107 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
Netice of Allemanistic	09/841,088	HOOVER ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Qing Chen	2191	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED i or other appropriate comm IGHTS. This application is	n this application. If not included unication will be mailed in due cours	
1. This communication is responsive to the amendment filed	<u>on June 9, 2008</u> .		
2. X The allowed claim(s) is/are 1,4,6-10,18,19,26,29,31-35,43,	44,51,54,56-60,68 and 69,	renumbered as 1-27.	
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents 	been received. been received in Application	on No	om the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EX	AMINER'S AMENDMENT or NOTIC	
5. CORRECTED DRAWINGS (as "replacement sheets") mus			
(a) ☐ including changes required by the Notice of Draftspers		w (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date	-	(1.10.0.10) attached	
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1	s Amendment / Comment o	he drawings in the front (not the back) of
each sheet. Replacement sheet(s) should be labeled as such in the first of the sheet. Before and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MAT	ERIAL must be submitted. Note t	he
Attachment(s)	5 🗆 Notice of Ir	Sformal Datant Application	
 Notice of References Cited (PTO-892) D Notice of Draftperson's Patent Drawing Review (PTO-948) 		ıformal Patent Application ummary (PTO-413),	
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No.	/Mail Date Amendment/Comment	
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's 9. □ Other	Statement of Reasons for Allowand	e
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DETAILED ACTION

- 1. This Office action is in response to the amendment filed on June 9, 2008.
- 2. Claims 1, 4, 6-10, 18, 19, 26, 29, 31-35, 43, 44, 51, 54, 56-60, 68, and 69 are pending.
- 3. Claims 1, 4, 6, 7, 9, 10, 18, 19, 26, 29, 31, 32, 34, 35, 43, 44, 51, 54, 56, 57, 59, 60, 68, and 69 have been amended.
- 4. Claims 2, 3, 5, 11-17, 20-25, 27, 28, 30, 36-42, 45-50, 52, 53, 55, 61-67, and 70-72 have been cancelled.
- 5. Claims 1, 4, 6-10, 18, 19, 26, 29, 31-35, 43, 44, 51, 54, 56-60, 68, and 69 are allowed, renumbered as 1-27.
- 6. The objections to Claims 14-22, 39-47, 50, and 64-72 are withdrawn in view of Applicant's cancellation of the claims.
- 7. The 35 U.S.C. § 112, second paragraph, rejections of Claims 7, 8, 22, 24, 25, 32, 33, 47, 57, 58, and 72 are withdrawn in view of Applicant's amendments to the claims or cancellation of the claims.
- 8. The 35 U.S.C. § 101 rejections of Claims 23-50 are withdrawn in view of Applicant's amendments to the claims or cancellation of the claims.

Examiner's Amendment

9. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with Blanche E. Schiller (Reg. No. 35,670) on August 21, 2008.

The application has been amended as follows:

AMENDMENTS TO THE CLAIMS

Please amend Claims 9, 10, 26, 34, 35, 44, 51, 59, and 60 as follows:

- 9. (Currently Amended) The method of claim 1, wherein said selected display mode is the function-centric <u>display</u> mode, and the thread data of a thread of said one or more threads comprises data indicating an amount of system resources consumed by the thread when executing a particular function of the at least one application.
- 10. (Currently Amended) The method of claim 1, wherein said selected display mode is the thread-centric <u>display</u> mode, and the thread data of a thread of said one or more threads comprises data indicating an amount of system resources consumed by the thread when executing one or more functions of the at least one application.
 - 26. (Currently Amended) A system of presenting data, said system comprising: a computing unit to:

select a display mode for displaying thread data of one or more threads of at least one application, said display mode comprising one of a function-centric Application/Control Number: 09/841,088

display mode and a thread-centric display mode, wherein said selecting comprises dynamically switching, by a user, between said function-centric display mode and said thread-centric display mode;

display said thread data based on the selected display mode, wherein if the selected display mode is the function-centric display mode, focus is on what happens within one or more functions of the at least one application, and the display comprises displaying a hierarchical structure which includes one or more functions having a parental relationship to the one or more threads, the hierarchical structure including corresponding thread data for each of the one or more threads of the one or more functions, and wherein a function includes accumulated thread data of a plurality of threads children to the function; and

if the selected display mode is the thread-centric display mode, focus is on thread activity, and the display comprises displaying a hierarchical structure in which the one or more threads have a parental relationship to one or more other components of said at least one application, the hierarchical structure including corresponding thread data for each of the one or more threads, said corresponding thread data of a thread including accumulated data of a plurality of components to which the thread has a parental relationship.

34. (Currently Amended) The system of claim 26, wherein said selected display mode is the function-centric <u>display</u> mode, and the thread data of a thread of said one or more threads

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comprises data indicating an amount of system resources consumed by the thread when executing a particular function of the at least one application.

- 35. (Currently Amended) The system of claim 26, wherein said selected display mode is the thread-centric <u>display</u> mode, and the thread data of a thread of said one or more threads comprises data indicating an amount of system resources consumed by the thread when executing one or more functions of the at least one application.
- 44. (Currently Amended) The system of claim 26, wherein the displaying based on a thread-centric display mode comprises presenting a plurality of data structures in an organizational structure, said organizational structure being based on thread activities, and wherein the presenting comprises using a hierarchical structure of: process data structure→thread data structure→file data structure→function data structure.
- 51. (Currently Amended) At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method of presenting data, said method comprising:

selecting a display mode for displaying thread data of one or more threads of at least one application, said display mode comprising one of a function-centric display mode and a thread-centric display mode, wherein said selecting comprises dynamically switching, by a user, between said function-centric display mode and said thread-centric display mode;

displaying said thread data based on the selected display mode, wherein if the selected display mode is the function-centric display mode, focus is on what happens within one or more functions of the at least one application, and said displaying comprises displaying a hierarchical structure which includes one or more functions having a parental relationship to the one or more threads, the hierarchical structure including corresponding thread data for each of the one or more threads of the one or more functions, and wherein a function includes accumulated thread data of a plurality of threads children to the function; and

if the selected display mode is the thread-centric display mode, focus is on thread activity, and said displaying comprises displaying a hierarchical structure in which the one or more threads have a parental relationship to one or more other components of said at least one application, the hierarchical structure including corresponding thread data for each of the one or more threads, said corresponding thread data of a thread including accumulated data of a plurality of components to which the thread has a parental relationship.

- 59. (Currently Amended) The at least one program storage device of claim 51, wherein said selected display mode is the <u>function-centric function-centric display</u> mode, and the thread data of a thread of said one or more threads comprises data indicating an amount of system resources consumed by the thread when executing a particular function of the at least one application.
- 60. (Currently Amended) The at least one program storage device of claim 51, wherein said selected display mode is the thread-centric <u>display</u> mode, and the thread data of a thread of

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said one or more threads comprises data indicating an amount of system resources consumed by the thread when executing one or more functions of the at least one application.

-- END OF AMENDMENT --

Reasons for Allowance

10. The following is an Examiner's statement of reasons for allowance:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, "wherein said selecting comprises dynamically switching, by a user, between said function-centric display mode and said thread-centric display mode; display said thread data based on the selected display mode, wherein if the selected display mode is the function-centric display mode, focus is on what happens within one or more functions of the at least one application, and the display comprises displaying a hierarchical structure which includes one or more functions having a parental relationship to the one or more threads, the hierarchical structure including corresponding thread data for each of the one or more threads of the one or more functions, and wherein a function includes accumulated thread data of a plurality of threads children to the function; and if the selected display mode is the thread-centric display mode, focus is on thread activity, and the display comprises displaying a hierarchical structure in which the one or more threads have a parental relationship to one or more other components of said at least one application, the hierarchical structure including corresponding thread data for each of the one or more threads, said corresponding thread data of a thread including

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accumulated data of a plurality of components to which the thread has a parental relationship" as recited in independent Claims 1, 26, and 51.

The closest cited prior art, the combination of US 6,611,276 (hereinafter "Muratori"), US 6,016,474 (hereinafter "Kim"), US 6,539,390 (hereinafter "Kiczales"), and US 6,553,564 (hereinafter "Alexander"), teaches a graphical user interface (GUI) that includes state indicators which show states of execution of threads running in microengines of a processor. However, the combination of Muratori, Kim, Kiczales, and Alexander fails to teach "wherein said selecting comprises dynamically switching, by a user, between said function-centric display mode and said thread-centric display mode; display said thread data based on the selected display mode, wherein if the selected display mode is the function-centric display mode, focus is on what happens within one or more functions of the at least one application, and the display comprises displaying a hierarchical structure which includes one or more functions having a parental relationship to the one or more threads, the hierarchical structure including corresponding thread data for each of the one or more threads of the one or more functions, and wherein a function includes accumulated thread data of a plurality of threads children to the function; and if the selected display mode is the thread-centric display mode, focus is on thread activity, and the display comprises displaying a hierarchical structure in which the one or more threads have a parental relationship to one or more other components of said at least one application, the hierarchical structure including corresponding thread data for each of the one or more threads, said corresponding thread data of a thread including accumulated data of a plurality of components to which the thread has a parental relationship" as recited in independent Claims 1, 26, and 51.

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Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/QC/ August 23, 2008

/Wei Y Zhen/

Supervisory Patent Examiner, Art Unit 2191